## NOTES

GALIUM REYNOLDSII EQUATED WITH G. GALAPAGOENSE WIGGINS.—Lauramay T. Dempster, Jepson Herbarium, University of California, Berkeley, CA 94720.

In 1980 (Allertonia 2(4), p. 255) I published *Galium reynoldsii*, based on two specimens housed at GH. One has the information "Andes, Capt. Reynolds," the other "S. Chili, T. G. Reynolds." No dates are given.

In 1971, nine years before the publication of *G. reynoldsii*, I saw on Floreana Island in the Galapagos, but did not collect, a very fine-textured *Galium* scrambling over shrubbery to a height of about four feet. Repeated attempts to have others collect this plant for me were finally successful when J. E. Lawesson sent me an excellent specimen, collected by him and associates in 1986. This, beyond all doubt, is identical with *G. reynoldsii* of Chile.

The most unusual character of this plant is its remote, solitary, outward-facing fruits, each opposite to a solitary leaf, except where branching occurs, the fruit then being subtended by two leaves. "The inflorescence should probably be interpreted as a series of extreme cymule reductions, each apparently axillary flower being in fact terminal" (Dempster 1980).

The relationship between the Floreana plant and G. galapagoense Wiggins (Madroño 20, p. 250. 1970) from Santa Cruz Island was not easily determined, since the type material (CAS) of G. galapagoense is very young and not abundant. Significantly, Wiggins remarked "This species is unlike any of the known species of Galium on the mainland of South America, particularly in that the dichasium has each terminal flower sessile between the subtending leaves, and with the slender branches of the next order of the inflorescence arising in the axils between the leaves and the terminal flower. . . . Occasionally one of the axillary branches in a dichasium fails to develop, and then the morphologically terminal flower appears to be axillary to a leaf borne on a straight branch." The latter situation is usual rather than occasional in material seen from Floreana Island and (presumably) Chile.

Although I have yet to see good mature material from Santa Cruz Island, G. reynoldsii Dempster (1980) and G. galapagoense Wiggins (1970) must be the same. The extraordinary distribution, if true, still needs to be explained.

Who was Reynolds? Barnhart (Biographical notes on botanists 3. 1965) mentions a William Reynolds who collected in southern Chile and Patagonia in 1837. Asa Gray (Reports of Wilkes Expedition p. 673. Proc. Amer. Philosophical Society 82, no. 5. 1940) dedicated his genus *Reynoldsia* "to J. N. Reynolds, Esq., who merits this commemoration for the unflagging zeal with which he urged upon our government the project of the South Sea Exploring Expedition, and also for having made, under trying circumstances, an interesting collection of dried plants in southern Chili, many years ago." Wilkes states (Wilkes, Narrative of the U.S. Exploring Expedition. 1852), "Previous to my arrival at Valparaiso, the naturalists and some officers on board the *Peacock* and *Relief* had made excursions into the interior. On my arrival, I allowed all those who could be spared, and were desirous of visiting Santiago, sufficient leave to make the trip. Several set out for that city, and some with a view of extending their journey to the Cordillera beyond."

Despite the plethora of initials (T. G., J. N. and William) it appears that the collector we are seeking was William Reynolds, listed (Wilkes, Exploring Expedition. 1858) among the officers and men of the U.S. Ship *Vincennes* as "Passed Mid" (N.B, he later became "Captain"). "Joined *Peacock*, 1839..."

Could Reynolds have collected his specimens in the Galapagos instead of Chile? It seems not, since there is no record of the Wilkes Expedition's having been near the Galapagos. We must assume, therefore, that *G. galapagoense* occurs in Chile, somewhere in the neighborhood of Santiago, or that the plants were carelessly handled, and a serious error made.

For much of the historical material I owe thanks to Joseph Ewan, who interested himself in the problem, and entertained me in a significant way in his library at the Missouri Botanical Garden.

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WHAT IS ARISTIDA PERUVIANA?—John R. Reeder, Herbarium, University of Arizona, Tucson, AZ 85721.

In 1975, A. A. Beetle (Phytologia 30:348) described, as a new species, Aristida peruviana, citing as the type Mexia 4172 from Dept. Arequipa, Province Islay, Peru (UC). [The correct Mexia number is 4173, and this is acknowledged in a letter from Beetle attached to the holotype sheet.] He indicated that the nearest relative of his new species appeared to be A. peninsularis Hitchc., a taxon which has been treated as a synonym of A. californica var. californica by Gould & Moran (Memoirs of the San Diego Society of Natural History 12:99, 100, 1981), and also by Reeder & Felger (Madroño 36:189, 1989). A. californica is a member of section Arthratherum, characterized by having the apex of the lemma articulated with a distinct, twisted awn column. The awns and column separate from the lemma body at maturity.

In his original description, Beetle makes no mention of an awn column. There is, moreover, no discussion concerning how the new species differs from its presumed closest relative, but the following key is provided:

First glume 10 mm long, second glume 20 mm long, awns 4 to 5 cm long

A. peninsularis Hitchc.

First glume 5-6 mm long, second glume 10 mm long, awns 1.5 to 3 cm long

A. peruviana Beetle.

Recently Dra. Hilda Longi-Wagner sent me a specimen of Aristida, clearly a member of section Arthratherum, which had been collected in Peru. She remarked that this collection was especially interesting, since it apparently represented the first South American record of an Aristida belonging to that section. This was somewhat of a surprise because I was aware of A. peruviana Beetle. Although I had not seen the type, I assumed it was a member of section Arthratherum because the author had indicated that it was a close relative of A. peninsularis.

Hoping to clarify the problem outlined above, I requested from the University of California, Berkeley, the loan of Beetle's type, along with any other specimens he had annotated as Aristida peruviana. When the loan arrived, it included the holotype (Mexia 4173), along with three other collections (Anderson 733, Hutchinson 502, and Weberbauer 6867). The latter three had been cited by Beetle in his original description, and are therefore paratypes. It is of interest that all of the above specimens, including the holotype, had been named A. adscensionis prior to the time that Beetle annotated them as his new species, A. peruviana.

Examination of these specimens revealed that all of them, indeed, do represent Aristida adscensionis L. All are readily recognized as members of that species, although there is some variation among them, as is to be expected with samples of this variable taxon. The Mexia specimen had been determined by Ivan Johnston; Oscar Tovar had annotated the Hutchinson collection. There is no indication of who first had named the Anderson specimen. Regarding the Weberbauer sheet, it was named originally "Aristida adscensionis L. fa. typica," perhaps by Weberbauer himself. Moreover, this same specimen was cited as A. adscensionis by Hitchcock (Contributions of the U.S. National Herbarium 24:404, 1927), and also, as noted by Beetle, under that same name by McBride (Publications of the Field Museum of Natural History, Botany Series 13:183, 1936).